CLAIMS

What is Claimed is:

1. A method of providing shared objects and node-specific objects in a cluster file system, said method comprising:

providing to a particular shared object an attribute that indicates any object created in said particular shared object from this point in time will be designated as node-specific; and

when a node causes a file system operation that is node-specific to be performed by accessing said particular shared object, performing said file system operation in an alternate directory corresponding to said node, wherein said alternate directory supports a node-specific object.

2. The method as recited in Claim 1 wherein said particular shared object is a container-type shared object.

3. The method as recited in Claim 1 wherein said particular shared object is a directory.

4. The method as recited in Claim 1 wherein said performing said file system operation in said alternate directory includes:

associating a pointer with said particular shared object;

using said pointer to point to a table having alternate directory information for each node;

if said alternate directory information for said node indicates that said alternate directory has not been created, creating said alternate directory for said node and updating said table with a location of said alternate directory.

5. The method as recited in Claim 1 wherein said file system operation that is node-specific includes creating one of a node-specific file and a node-specific directory.

6. The method as recited in Claim 5 wherein said file system operation that is node-specific includes modifying one of said node-specific file and said node-specific directory.

7. The method as recited in Claim 5 wherein said file system operation that is node-specific includes deleting one of said node-specific file and said node-specific directory.

8. A computer-readable medium comprising computer-executable instructions stored therein for performing a method of providing shared objects and node-specific objects in a cluster file system, said method comprising:

providing to a particular shared object an attribute that indicates any object created in said particular shared object from this point in time will be designated as node-specific; and

when a node causes a file system operation that is node-specific to be performed by accessing said particular shared object, performing said file system operation in an alternate directory corresponding to said node, wherein said alternate directory supports a node-specific object.

9. The computer-readable medium as recited in Claim 8 wherein said particular shared object is a container-type shared object.

10. The computer-readable medium as recited in Claim 8 wherein said particular shared object is a directory.

11. The computer-readable medium as recited in Claim 8 wherein said performing said file system operation in said alternate directory includes:

associating a pointer with said particular shared object;

using said pointer to point to a table having alternate directory information for each node;

if said alternate directory information for said node indicates that said alternate directory has not been created, creating said alternate directory for said node and updating said table with a location of said alternate directory.

12. The computer-readable medium as recited in Claim 8 wherein said file system operation that is node-specific includes creating one of a node-specific file and a node-specific directory.

13. The computer-readable medium as recited in Claim 12 wherein said file system operation that is node-specific includes modifying one of said node-specific file and said node-specific directory.

14. The computer-readable medium as recited in Claim 12 wherein said file system operation that is node-specific includes deleting one of said node-specific file and said node-specific directory.

15. A system comprising:

a cluster having a plurality of nodes;

a mass storage device coupled to said cluster; and

a cluster file system configured to automatically provide shared objects and node-specific objects to each node without duplicating shared objects when providing node-specific objects.

16. The system as recited in Claim 15 wherein said cluster file system enables providing to a particular shared object an attribute that indicates any object created in said particular shared object from this point in time will be designated as node-specific, and wherein when one of said nodes causes a file system operation that is node-specific to be performed by accessing said particular shared object, said cluster file system performs said file system operation in an alternate directory

corresponding to said node, wherein said alternate directory supports a node-specific object.

17. The system as recited in Claim 16 wherein said cluster file system associates a pointer with said particular shared object, wherein said cluster file system uses said pointer to point to a table having alternate directory information for each node, and wherein if said alternate directory information for said node indicates that said alternate directory has not been created, said cluster file system creates said alternate directory for said node and updates said table with a location of said alternate directory.

18. The system as recited in Claim 16 wherein said file system operation that is node-specific includes creating one of a node-specific file and a node-specific directory.

19. The system as recited in Claim 18 wherein said file system operation that is node-specific includes modifying one of said node-specific file and said node-specific directory.

20. The system as recited in Claim 18 wherein said file system operation that is node-specific includes deleting one of said node-specific file and said node-specific directory.

21. The system as recited in Claim 15 wherein said particular shared object is a container-type shared object.

22. The system as recited in Claim 15 wherein said particular shared object is a directory.